

What is claimed is:

1. A portable mobile unit capable of making bi-directional wireless communication, said unit comprising:

a controller for controlling an intensity of a transmission signal on the basis of an intensity control signal contained in a received signal,

wherein said controller carries out a control operation so that at least either one of a display or an alarm is generating when the intensity control signal contains a command to set the transmission signal to a maximum transmission output despite the intensity of the received signal being within a predetermined range.

2. A portable mobile unit comprising:

a receiver circuit for receiving a downlink signal from a base station,

a signal demodulator for dividing an output from said receiver circuit into a communication signal and a control signal,

a receiver for outputting voice on the basis of an audio output signal included in said communication signal,

a control processor to which said control signal from said signal demodulator is supplied,

a microphone for converting voice into an input audio signal,

a signal modulator for performing code modulation of said input audio signal, and

a transmitter circuit for amplifying and modulating an output from said signal modulator and for sending out a resultant signal as an uplink signal from an antenna,

wherein said downlink signal contains an intensity control signal for controlling intensity of said uplink signal, said control processor generates an alarm when a signal for maximizing

intensity of said uplink signal included within said intensity control signal lasts for predetermined period of time or more, while said downlink signal is normally received at said receiver circuit.

3. A portable mobile unit comprising:

a receiver circuit for receiving a downlink signal from a base station,

a signal demodulator for dividing an output from said receiver circuit into a communication signal and a control signal,

a receiver for outputting voice on the basis of an audio output signal included in said communication signal,

a control processor to which said control signal from said signal demodulator is supplied,

a microphone for converting voice into an input audio signal,

a signal modulator for performing code modulation of said input audio signal, and

a transmitter circuit for amplifying and modulating an output from said signal modulator and for sending out a resultant signal as an uplink signal from an antenna,

wherein the downlink signal includes a signal for controlling a intensity of said uplink signal, said control processor generates an alarm when the condition in which the output from the transmitter circuit is a maximum level thereof lasts for a predetermined period of time or longer on the basis of the intensity control signal, while said downlink signal is received normally at said receiver circuit.

4. A portable mobile unit comprising:

a receiver circuit for receiving a downlink signal from a base station,

a signal demodulator for dividing an output from said receiver circuit into a communication signal and a control signal,

a receiver for outputting voice on the basis of an audio output signal included in said communication signal,

a control processor to which said control signal from said signal demodulator is supplied,

a microphone for converting voice into an input audio signal,

a signal modulator for performing code modulation of said input audio signal, and

a transmitter circuit for amplifying and modulating an output from said signal modulator and for sending out a resultant signal as an uplink signal from an antenna,

wherein said control processor generates an alarm when the number of communicable base stations is one.

5. A communication system comprising:

a base station, and

a portable mobile unit capable of making bi-directional wireless communication with said base station, and provided with a controller for controlling a transmission intensity of an uplink signal on the basis of an intensity control signal included in a downlink signal from the base station,

wherein said base station judges as a failure for said uplink signal unable to reach said base station when condition in which the intensity of said reception uplink signal is lower than a predetermined level lasts for a predetermined period of time or longer even though the base station transmits an intensity control signal which includes a command to set the transmission intensity of said uplink signal to a maximum transmission output, and said base station transmits a signal for either generating a display alarm or an audio alarm to said portable mobile unit.

6. A communication system comprising:

a base station, and

a portable mobile unit capable of making bi-directional wireless communication with said base station, provided with a controller for controlling a transmission intensity of an uplink signal on the basis of an intensity control signal included in a downlink signal from said base station, and for carrying out a charging procedure for the wireless communication made,

wherein said base station judges as a failure for said uplink signal unable to reach said base station when condition in which the intensity of said reception uplink signal is lower than a predetermined level lasts for a predetermined period of time or longer even though the base station transmits an intensity control signal which includes a command to set the transmission intensity of said uplink signal to a maximum transmission output, and said base station stops said charging procedure.

7. A method of generating an alarm when there is a possibility that a transmission signal in bi-directional wireless communication does not reach a base station though intensity of a received signal is within a normal range, said method comprising the steps of:

judging whether the intensity of said received signal is within a normal range,

judging whether an intensity control signal includes a command to set the intensity control signal to a maximum transmission output, and

generating either a display indicator or an alarm when said intensity control signal includes a command to set said intensity control signal to a maximum transmission output.

8. A method of generating an alarm when a judgement is made as an uplink signal failure in bi-directional wireless communication between a base station and a portable mobile unit in case said uplink signal failed to reach said base station though an intensity of a downlink signal is within a normal range, said method comprising the steps of:

receiving an intensity control signal included in said downlink signal which is transmitted from said base station,

judging whether said downlink signal is received normally at a receiver circuit,

judging whether a signal for maximizing the intensity of said uplink signal is included in said intensity control signal when said downlink signal is received normally,

measuring the time of said signal maximizing the intensity of said uplink signal, when said intensity control signal includes said signal for maximizing the intensity of said uplink signal, and

generating an alarm when said time measured lasts for a predetermined period of time or longer.

9. A method of generating an alarm when a judgement is given that an uplink signal in bi-directional wireless communication between a base station and a portable mobile unit fails to reach the base station though the intensity of a downlink signal is within a normal range, said method comprising the steps of:

receiving an intensity control signal contained in the downlink signal and transmitted from the base station,

judging whether a receiver circuit receives said downlink signal normally,

judging whether an output from a transmitter circuit is at a maximum level when said downlink signal is normally received,

measuring the time during which the output from said transmitter circuit is at a maximum level, and

generating an alarm when the time measured lasts for a period of time not shorter than a predetermined period of time.

10. A method of generating an alarm when a judgement is given that an uplink signal in a bi-directional wireless communication between a base station and a portable mobile unit fails to reach said base station even though an intensity of a downlink signal is within a normal range, said method comprising the steps of:

counting the number of communicable base stations, and

generating an alarm when the number of said communicable base station is one.

11. A portable mobile unit capable of making bi-directional wireless communication, said unit comprising:

a controller for controlling the intensity of a transmission signal on the basis of an intensity control signal contained in a received signal,

wherein said controller carries out a control operation so that at least either one of a display alarm or an audio alarm is made when the intensity control signal contains a command to set the transmission signal to a maximum transmission output.

12. A portable mobile unit comprising:

a receiver circuit for receiving a downlink signal from a base station,

a signal demodulator for dividing an output from said receiver circuit into a communication signal and a control signal,

a control processor operative for receiving said control signal, and

a transmitter circuit for amplifying and modulating an output signal to be transmitted as an uplink signal from an antenna,

wherein said control signal contains an intensity control signal for controlling the intensity of said uplink signal, said control processor generating an alarm when a signal for

maximizing intensity of said uplink signal included within said control signal lasts for predetermined period of time.

13. A portable mobile unit comprising:

- a receiver circuit for receiving a downlink signal from a base station,
- a signal demodulator for dividing an output from said receiver circuit into a communication signal and a control signal,
- a control processor operative for receiving said control signal, and
- a transmitter circuit for amplifying and modulating an output signal to be transmitted as an uplink signal from an antenna,

wherein said control processor generates an alarm when the number of base stations said portable mobile unit can communicate with properly is one.